Please type a plus sign (+) inside this box +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
perwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute	for form 1449A/F	РТО		Complete if Known			
				Application Number	Unassigned ALL 2		
	RMATIO			Filing Date	January 11, 2006		
STAT	EMENT	BY APP	LICANT	First Named Inventor	Atsutaka MANABE et al.		
				Group Art Unit	Unassigned		
	(use as many s	sheets as nec	essary)	Examiner Name	Unassigned		
Sheet	1	of	2	Attorney Docket Number	MERCK-3115		

U.S. PATENT DOCUMENTS U.S. Patent Document								
Examiner Initials *	Cite No.'	Kind Code ¹ Number (<i>if known</i>)		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY			
/SW/	1	4594465			June 10, 1986			
	2	5384071			January 24, 1995			
	3	5358663			October 25, 1994			
7	4	6083423			July 4, 2000			
/SW/	5	5800737			September 1, 1998			

				-	FORE	IGN PATENT DOCUMEN	NTS		
Examiner Initials*		Cite No.			Ment Kind Code ^s (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY		T ⁴
				0132377		Merck Patent GmbH	January 30, 1985	Appear	Equv to cite 1
1	Ī	7	wo	8707890		Secr Defence Brit	December 30, 1987		Equv to cite 2
		8	GB	2198743		Secr Defence	June 22, 1988		
		9	GB	2200912		Secr Defence	August 17, 1988		
		10	wo	8903821		Secr Defence Brit	May 5, 1989		Equv to cite 3
		11	wo	9115555		Merck Patent GmbH	October 17, 1991		Equv to cite 4
		12	wo	9533802		Central Research Lab Ltd.	December 14, 1995		Equv to cite 5
	·	13	JP	04279695		Dainippon Ink & Chem Inc.	October 5, 1992		
/SW	//	14	GB	2367058		Merck Patent GmbH	March 27, 2002		

Examiner /Shean Wu/	Date Considered	09/24/2007	7
---------------------	--------------------	------------	---

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. Number refers to English language corresponding family member.

IAP20 Rec'd FG./770 11 JAN 2006

Please type a plus sign (+) inside this box +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO Complete if Known, **Application Number** Unassigned / 5046 INFORMATION DISCLOSURE Filing Date January 11, 2006 STATEMENT BY APPLICANT First Named Inventor Atsutaka MANABE et al. **Group Art Unit** Unassigned (use as many sheets as necessary) **Examiner Name** Unassigned Sheet of **Attorney Docket Number MERCK-3115**

	,	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	include name of the author (in CAPITAL LETTERS), little of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	τ:
	15	Patent Abstracts of Japan Bd. 017, Nr. 079 (C-1027), 17. February6 1993 (1993-02-017)	
	16	CHAN, L.K. M. et al: "synthesis and evaluation of some 4,4"-disubstituted lateral fluoro-1,1": 4',1"-terphenyls" MOLECULAR CRYSTALS AND LIQUID CRYSTALS; ISSN: 0026-8941, Bd. 123,1985, 185-204, XP009038157.	
	17	CHAN, L.K. M. et al: "Reentrant nematic and injected smectic behaviour in binary mictures including those of terminally non-polar compounds" MOL. CRYST. LiQ. CRYST. Bd. 150, 1987, 335-359, XP009038155.	
	18	CHAN, L.K. M. et al: "Synthesis and liquid crystal behaviour of further 4,4"-disubstituted 2'-fluoro-1,1':4',1"-terphenyls" MOLECULAR CRYSTALS AND LIQUID CRYSTALS; ISSN: 0026-8941, Bd. 158, 1988, XP000005279.	
		GRAY, G. W. et al: "The synthesis of several lateral difluoro-substituted and 4,4"-dialkyland 4,4"-alkoxyalkyl-terphenyls and a rationalization of the effect of such substitution on mesophase type and transition temperatures" MOLECULAR CRYSTALS AND LIQUID CRYSTALS; ISSN: 0026-87941, Bd. 204, 1991, 43-64, XP000236763	
		HIRD M ET AL: "The synthesis transition temperatures of some lateral cyano-substituted 1,1'1:4, 1"-terphenyls" MOLECULAR CRYSTALS AND LIQUID CRYSTALS, Bd. 206, 1991, 205-221, XP000236824.	
	"	XU, J. et al: "Liquid crystal system as molecular machinery: investigation of dynamic impedance matching between molecular core and termainal groups using rotor-bearing model" Japanese journal of applied physics, Bd. 39, Nr. 4A, Part 1, 2000, 1801-1807, XP001014936.	
	22	Reiffenrath, V. et al: "Synthesis and properties of liquid crystalline materials with high optical anisotropy" SPIE LIQUID CRYSTAL DISPLAY AND APPLICATIONS, Bd. 1257, 1990, 84-94, XP009038208.	

		······································		
Examiner	•	l Date	00/07/0007	
Signature	/Shean Wu/	1 1 1 1	09/27/2007	
Coldinarrie	/Olicali VVu/	Considered		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.